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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/966,751

10/01/2001

Emmanuelle Belli

13833.0008

3618

7590

03/28/2006

STEPTOE & JOHNSON LLP  
1330 Connecticut Ave., N.W.  
Washington, DC 20036

EXAMINER

HUI, SAN MING R

ART UNIT

PAPER NUMBER

1617

DATE MAILED: 03/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/966,751

Applicant(s)

BELLI, EMMANUELLE

Examiner

San-ming Hui

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 26,28-35,37-39 and 41-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26,28-35,37-39 and 41-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 29, 2005 has been entered.

Claims 26, 28-35, 37-39, 41-48 are pending.

The outstanding rejection under 35 USC 112, first paragraph is withdrawn in view of the amendments filed December 29, 2005.

Examiner thanks for the clarification made by the attorney of record, Mr. Charles Wnedel, during the interview on March 12, 2006. The improvement of the viscosity of the specific thickening systems using non-cellulosic thickening agent was discussed. Such improvement was demonstrated in the Examples disclosed in the specification.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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Claims 39, and 41-48 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation directed to the viscosity of at least about 1.9Pa.s." recited in the claims have no support in the originally filed specification and claims. The viscosity of at least 1.9Pa.s. means the viscosity being 1.9 Pa.s. or more, which including for example 2.7 Pa.s.. The originally filed specification only discloses the viscosity being about 1.9Pa.s. and 2.54Pa.s.

Examiner considers the herein claimed composition as comprising the four monomers, i.e., butyl acrylate, acrylic acid, methacrylic acid, and allyl methacrylate in the film-forming copolymer component.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 26, 28-35, and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Midha et al. (USPN 5,986,015) in view of Gebhard et al. (US Patent 5,612,397).

Midha et al. (USPN 5,986,015) teaches a cosmetic composition comprising polymers of monomers such acrylic acid, methacrylic acid, acrilamide (see col. 6, line 63 to col. 7, line 47). Midha et al. also teaches a hair styling gel comprising 2.5 weight percent of Graft copolymer 1.2 (which comprises methacrylic acid and tert-butyl acrylate), 0.5 weight percent Carbomar 940 (a thickening agent), see particularly col. 17 lines 23-26 and col. 19, example 17. Midha et al. (USPN 5,986,015) further teaches the addition of optional ingredients such as xanthan gum (a polymeric thickener) to its cosmetic hair composition, see col.16, lines 14-26. Midha et al. teaches that the concentration of optional ingredients will typically and collectively range from 0.05% to 30% by weight of the composition, see particularly col. 14, lines 36-46. Midha et al. also teaches that the cosmetic composition is suitable for application to hair (see col. 11 line 59 in particular).

Midha et al. does not expressly teach the composition have the herein viscosity. Midha et al. does not expressly teach the employment of the herein claimed branched block copolymer and the herein claimed thickeners in a cosmetic hair gel composition.

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Midha et al. does not expressly teach allyl methacrylate as one of the monomer employed in the film-forming copolymer.

Gebhard et al. teaches a composition useful for personal care products comprises butyl acrylate, acrylic acid, methacrylic acid, and allyl methacrylate, which could improve the clarity in wet state of the composition (See the abstract, col. 2, lines 37-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ specifically the claimed branched block copolymer and the thickeners claimed herein in a cosmetic hair gel composition and adjust the viscosity to the herein claimed range. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ butyl acrylate, acrylic acid, methacrylic acid, and allyl methacrylate as copolymer in the composition of Midha et al.

One of ordinary skill in the art would have been motivated to employ the herein claimed branched block copolymer and the thickeners in a cosmetic hair gel composition. The herein claimed polymer and the herein claimed thickeners are taught by examiner's cited prior art to be used in cosmetic hair gel compositions. Incorporating these well-known hair gel components for formulating the herein claimed cosmetic hair gel composition would be obvious as considered within the purview of skilled artisan, absent evidence to the contrary. Furthermore, the optimization of result effect parameters (e.g., viscosity of the composition) is obvious as being within the skill of the artisan. Please note that the viscosity of the composition depends upon many factors such as the molecular weight of the polymers and the concentration of the polymer.

Adjusting the concentration, thereby the viscosity, of the composition is within the purview of skilled artisan, absent evidence to the contrary.

Examiner notes that the transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps and those that do not materially affect the basic and novel characteristic of the claimed invention. For the purpose of searching for and applying prior art under 35 USC 102 and 103, absent clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising" See, e.g., PPG, 156 F.3d at 1355, 48 USPQ2d at 1355. ("PPG could have defined the scope of the phrase consisting essentially of for purposes of its patent by making clear in its specification what it regarded as constituting a material change in the basic and novel characteristics of the invention."). When an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of," applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention. *In re De Lajarte*, 337 F.2d 870, 143 USPQ 256 (CCPA 1964). See also *Ex parte Hoffman*, 12 USPQ2d 1061, 1063-64 (Bd. Pat. App. & Inter. 1989) ("Although consisting essentially of is typically used and defined in the context of compositions of matter, we find nothing intrinsically wrong with the use of such language as a modifier of method steps. . . [rendering] the claim open only for the inclusion of steps which do not materially affect the basic and novel characteristics of the claimed method. To determine the steps included versus excluded the claim must be read in light of the

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specification. . . . [I]t is an applicant's burden to establish that a step practiced in a prior art method is excluded from his claims by "consisting essentially of" language." (See MPEP 2111.03).

One of ordinary skill in the art would have been motivated to employ butyl acrylate, acrylic acid, methacrylic acid, and allyl methacrylate as copolymer in the composition of Midha et al. Employing butyl acrylate, acrylic acid, methacrylic acid, and allyl methacrylate as copolymer in the composition of Midha et al. would be reasonably expected to be useful in effectively formulate a clear gel formulation of Midha et al.

Claims 41-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Midha et al. (USPN 5,986,015) in view of Merck (Merck Index, 11<sup>th</sup> ed., 1989, monograph 4486).

Midha et al. (USPN 5,986,015) teaches a cosmetic composition comprising polymers of monomers such as acrylic acid, methacrylic acid, acrilamide (see col. 6, line 63 to col. 7, line 47). Midha et al. (USPN 5,986,015) also teaches a hair styling gel comprising 2.5 weight percent of Graft copolymer 1.2 (which comprises methacrylic acid and tert-butyl acrylate), 0.5 weight percent Carbomar 940 (a thickening agent), see particularly col. 17 lines 23-26 and col. 19, example 17. Midha et al. (USPN 5,986,015) further teaches the addition of optional thickening agents such as xanthan gum (a polymeric thickener) to its cosmetic hair composition, see col.16, lines 14-26. Midha et al. (USPN 5,986,015) teaches that the concentration of optional ingredients will typically and collectively range from 0.05% to 30% by weight of the composition, see particularly



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col. 14, lines 36-46. Midha et al. (USPN 5,986,015) that the cosmetic composition is suitable for application to hair, see col. 11 line 59 in particular.

Midha et al. does not expressly teach the composition have the herein viscosity. Midha et al. does not expressly teach the employment of the herein claimed branched block copolymer and the herein claimed thickeners as guar gum in a cosmetic hair gel composition.

Merck Index teaches the guar gum is a well-known thickening agent useful in cosmetic, pharmaceutical and food industry, especially for pharmaceutical jelly composition (See the USE Section).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ specifically the claimed branched block copolymer and guar gum in a cosmetic hair gel composition and adjust the viscosity to the herein claimed range.

One of ordinary skill in the art would have been motivated to employ the herein claimed branched block copolymer and guar gum in a cosmetic hair gel composition. The herein claimed polymer is taught by examiner's cited prior art to be used in cosmetic hair gel compositions. Incorporating these well-known hair gel components for formulating the herein claimed cosmetic hair gel composition would be obvious as considered within the purview of skilled artisan, absent evidence to the contrary. In addition, guar gum is also known to be useful as a thickening agent for jelly composition. Incorporating well-known thickening agents, such as guar gum, in the composition of Midha et al. would be considered obvious as being selecting from the

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obvious alternatives. Furthermore, the optimization of result effect parameters (e.g., viscosity of the composition) is obvious as being within the skill of the artisan. Please note that the viscosity of the composition depends upon many factors such as the molecular weight of the polymers and the concentration of the polymer. Adjusting the concentration, thereby the viscosity, of the composition is within the purview of skilled artisan, absent evidence to the contrary.

Claims 45-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Midha et al. (USPN 5,986,015) in view of Merck (Merck Index, 11<sup>th</sup> ed., 1989, monograph 4486) and Gebhard et al.

Midha et al. (USPN 5,986,015) teaches a cosmetic composition comprising polymers of monomers such as acrylic acid, methacrylic acid, acrilamide (see col. 6, line 63 to col. 7, line 47). Midha et al. (USPN 5,986,015) also teaches a hair styling gel comprising 2.5 weight percent of Graft copolymer 1.2 (which comprises methacrylic acid and tert-butyl acrylate), 0.5 weight percent Carbomar 940 (a thickening agent), see particularly col. 17 lines 23-26 and col. 19, example 17. Midha et al. (USPN 5,986,015) further teaches the addition of optional thickening agents such as xanthan gum (a polymeric thickener) to its cosmetic hair composition, see col.16, lines 14-26. Midha et al. (USPN 5,986,015) teaches that the concentration of optional ingredients will typically and collectively range from 0.05% to 30% by weight of the composition, see particularly col. 14, lines 36-46. Midha et al. (USPN 5,986,015) that the cosmetic composition is suitable for application to hair, see col. 11 line 59 in particular.

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Midha et al. does not expressly teach the composition have the herein viscosity. Midha et al. does not expressly teach the employment of the herein claimed branched block copolymer and the herein claimed thickeners as guar gum in a cosmetic hair gel composition. Midha et al. does not expressly teach allyl methacrylate as one of the monomer employed in the film-forming copolymer.

Merck Index teaches the guar gum is a well-known thickening agent useful in cosmetic, pharmaceutical and food industry, especially for pharmaceutical jelly composition (See the USE Section).

Gebhard et al. teaches a composition useful for personal care products comprises butyl acrylate, acrylic acid, methacrylic acid, and allyl methacrylate, which could improve the clarity in wet state of the composition (See the abstract, col. 2, lines 37-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ specifically the claimed branched block copolymer and guar gum in a cosmetic hair gel composition and adjust the viscosity to the herein claimed range. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ butyl acrylate, acrylic acid, methacrylic acid, and allyl methacrylate as copolymer in the composition of Midha et al.

One of ordinary skill in the art would have been motivated to employ the herein claimed branched block copolymer and guar gum in a cosmetic hair gel composition. The herein claimed polymer is taught by examiner's cited prior art to be used in cosmetic hair gel compositions. Incorporating these well-known hair gel components for

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formulating the herein claimed cosmetic hair gel composition would be obvious as considered within the purview of skilled artisan, absent evidence to the contrary. In addition, guar gum is also known to be useful as a thickening agent for jelly composition. Incorporating well-known thickening agents, such as guar gum, in the composition of Midha et al. would be considered obvious as being selecting from the obvious alternatives. Furthermore, the optimization of result effect parameters (e.g., viscosity of the composition) is obvious as being within the skill of the artisan. Please note that the viscosity of the composition depends upon many factors such as the molecular weight of the polymers and the concentration of the polymer. Adjusting the concentration, thereby the viscosity, of the composition is within the purview of skilled artisan, absent evidence to the contrary.

One of ordinary skill in the art would have been motivated to employ butyl acrylate, acrylic acid, methacrylic acid, and allyl methacrylate as copolymer in the composition of Midha et al. Employing butyl acrylate, acrylic acid, methacrylic acid, and allyl methacrylate as copolymer in the composition of Midha et al. would be reasonably expected to be useful in effectively formulate a clear gel formulation of Midha et al.

### ***Response to Arguments***

Applicant's arguments filed December 29, 2005 averring the unexpected benefits demonstrated in the instant specification have been fully considered but they are not persuasive. Examiner notes that It is applicant's burden to demonstrate unexpected results over the prior art. See MPEP 716.02, also 716.02 (a) - (g). Furthermore, the unexpected results should be demonstrated with evidence that the differences in results

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are in fact unexpected and unobvious and of both statistical and practical significance. *Ex parte Gelles*, 22 USPQ2d 1318, 1319 (Bd. Pat. App. & Inter. 1992). Moreover, evidence as to any unexpected benefits must be "clear and convincing" *In re Lohr*, 137 USPQ 548 (CCPA 1963), and be of a scope reasonably commensurate with the scope of the subject matter claimed, *In re Linder*, 173 USPQ 356 (CCPA 1972). In the instant case, only one inventive thickening system is tested. Different thickening agent would have different viscosity and therefore, mixing various thickenings to improve viscosity would have been reasonable expected by one of ordinary skill in the art. Furthermore, the showing is not reasonably commensurate with the scope of the subject matter claimed. Therefore, the claims are still considered properly rejected under 35 USC 103(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to San-ming Hui whose telephone number is (571) 272-0626. The examiner can normally be reached on Mon 9:00 to 1:00, Tu - Fri from 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, PhD., can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
San-ming Hui  
Primary Examiner  
Art Unit 1617